

## Indian communities work together to improve housing

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*Gram Vikas, an NGO established in 1979, has developed and is implementing -a Rural Health and Environment Programme (RHEP) in Orissa, India. The programme demonstrates how poor and marginalised communities can be involved in sustainable and affordable housing and sanitation.*

Located on the eastern coastline of India, Orissa is one of its poorest states. In the rural areas 80 per cent of the population live below the poverty line with an annual income of less than \$300. The quality of traditional housing is poor with no protection against cyclones and flooding.

RHEP's aim is to harness the physical, social, natural and human capital in every village through community action and so create a spiralling process of development.

Gram Vikas will only work in a village once each and every family, irrespective of status, agrees to be part of the programme. This is rooted in the premise that sanitation can only be dealt with properly when every household adopts safe sanitation practices and in the belief that poor people can and will pay for products and services they believe will improve their quality of life.

### **Family commitment**

The villagers come together to raise the necessary funds for the project and to make joint decisions, initially for the water supply, but eventually for all the other decisions which a community needs to take.

Gram Vikas has designed new houses which have an area of 41 sq.m the houses. They are much larger than the typical dwellings of 10 sq.m. They include two multi-use rooms, a kitchen and veranda. The cost of this dwelling is 51,163 with the family contributing 30 per cent of the cost through their labour and local materials. The remaining 70 per cent is facilitated by Gram Vikas as a soft loan from the Housing Development and Finance Corporation, a private financial institution. The loan is repayable by the household over 15 years at nine per cent interest. The financing of this programme has changed since it began in 1991 from a full grant to a full loan, with the entire cost of the house now being met by the family.

The housing programme is linked with training which will help families improve their incomes and food security. A range of skills is gained as a result of the programme including Construction (masonry, stone-cutting, wire-bending, carpentry, plumbing and electrical fittings), forestry and fish-fanning. Over 500 masons, including 93 women were trained in

2000- 2001. Villagers are encouraged to develop common lands and wastelands with tree plantations.

### **Sanitation**

In each village the entire community is brought together to form a village committee to build a central water tank. Water is pumped from a safe source and stored in the overhead tank and supplied to every family through an underground pipe system.

Toilets and bathrooms with running water are provided on an individual or community basis with two leach or soak pits per toilet. Once the first pit is full the family turns the waste to the second pit. Bananas are planted near these leach pits to absorb excess water which means there is little need to ever empty them. The solid waste in the leach pits turns to humus and is used to fertilise crops. The communities are also supported in developing community infrastructure such as roads, drains and grain banks.

### **Corpus fund**

A critical factor for project sustainability is the setting up of a corpus fund in each village at the start of the intervention. All families contribute an average of Rs 1,000 (\$22) to the fund, which is only used for extending the same facilities to new families as the village grows, ensuring 100 per cent coverage at all times. Since contributions to the fund is mandatory, the richer families subsidise poorer families or part support is extended from the community fund. Setting up the corpus fund has led to enhanced village unity as all families are shareholders in the fund and have an equal stake in decision-making. The corpus fund gives a sense of financial security to the villagers and has been used as collateral in some villages to raise loans from banks.

The total spent from 1992- 2001 on providing toilets, bathrooms, water tanks, water supply systems, compost tanks, community halls and drainage is \$1 million. Gram Vikas met 66 per cent of this cost, 32 per cent came from households and 2 per cent from the government. The maintenance and running costs are met by the villagers themselves and these costs are approximately \$12.50 per household per year, covering electricity bills, repairs and maintenance of pumps and the salary of the pump operator.

Participation of women Women have taken the lead in ensuring that the programme is completed on time and that the project continues after Gram Vikas withdraws. It is the women in the community who benefit most from the improved water supply since they no longer need to spend hours every day fetching and carrying water. They are also able to bath in clean water in the privacy of their own home, rather than having to use the polluted village pond.

There has been a notable reduction in the incidence of skin disease and gynaecological problems since the heavily polluted village ponds are no longer used for bathing. As a consequence, the ponds are cleaner and are now used for pisci-culture, bringing a much welcome additional source of income and protein to the village. An indicator of the success of the programme is that a private water supply and sanitation are now featured on the marriage lists of young village women.

RHEP aims to create an environment in the villages to encourage the communities to become politically assertive. It encourages each individual to be involved in the decision-making process and helps village committees to register themselves as legal entities and to keep proper

accounting records. The legal status enables villagers to play a proactive role in securing development funds that are available as part of government programmes.

### **Construction**

A range of construction materials are used, primarily stone or locally made bricks. Local masons have been trained to use innovative masonry bonds which are 30 per cent more resource efficient than conventional brick masonry. The brick walls are built with mud mortar, and the external plastering is done with cement mortar.

The roofs of the houses, toilets and bathrooms are built with filler slabs. These are lighter and cheaper than normal concrete slabs because some of the steel and cement has been replaced by tiles. In some circumstances, ferro-cement or tile roofs are used, depending on the local resources available.

### **Impact**

The programme began in 1992 with five villages and 377 households. Currently it is operating in 105 villages with over 8,000 households. Initially it took two or three years to convince villagers of the value of joining the programme, but the acknowledged success means that many villages are now pressing for it to be implemented. Gram Vikas aims to have reached 100,000 families in the rural areas of Orissa by 2020. It recognises that achieving a critical mass is crucial if the government, private and nongovernmental organisations are to react to a community's demands. They are seeking to cluster new villages around existing ones in order to increase the impact.

For the families, building and living in a permanent, disaster-proof, spacious and comfortable home is a matter of great pride and dignity. It also prompts them to raise their hopes and expectations and gives them confidence to move ahead in life and come out of the cycle of poverty. This is reflected in the marked increase in the school attendance in RHEP villages and in the creation of Village Health Committees that monitor children's health on a regular basis.

Gram Vikas is now partnering the government in implementing a rural drinking water supply programme across Orissa, and demonstrating its sanitation system. Its holistic and sustainable approach to development are realising Mahatma Gandhi's vision of sustainable "village republics", which continues to be increasingly recognised throughout India.

For further information please contact Joe Madiath, Executive Director, Gram Vikas, Mohitda Village, Berhampur 760 002, Dist: Ganjam, Orissa, India. Fax: +91 680 2261 862; e-mail: [info@gramvikas.org](mailto:info@gramvikas.org); web site: [www.gramvikas.org](http://www.gramvikas.org)

### **International Study visit: Rural Health and Environment Programme (RHEP).**

BSHF is organising a five-day study visit to Gram Vikas's project in Orissa. Bursaries are available. An interactive application form can be found on the BSHF web site at [www.bshf.org](http://www.bshf.org).